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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service

PUBLICATIONS AND PATENTS ON FERMENTATION RESEARCH
DURING 1969

at the

Northern Utilization Research and Development Division
Peoria, Illinois 61604

PUBLICATIONS

JUL 15 1970

[Publications marked with an asterisk (*) are not available for distribution. When requesting specific reprints, please order by number and use your zip code.]

- 2461 AUTOMATED METHOD TO DETERMINE D-FRUCTOSE IN THE PRESENCE OF D-GLUCOSE
M. C. Cadmus and G. W. Strandberg
Anal. Biochem. 26(3): 484-487. December 1968
- 2607* MICROBIOLOGICAL TRANSFORMATION OF TERPENES
A. Ciegler
In "Fermentation Advances," ed. D. Perlman, pp. 689-714
New York. 1969
- 2486 NET SYNTHESIS OF ¹⁴C-LABELED LIPIDS AND AFLATOXINS IN RESTING CELLS OF ASPERGILLUS PARASITICUS
R. W. Detroy and C. W. Hesseltine
Develop. Ind. Microbiol. 10: 127-133. 1969
- 2487 PROGRESS IN CLARIFICATION OF THE TAXONOMIC AND NOMENCLATURAL STATUS OF SOME PROBLEM ACTINOMYCETES
T. G. Pridham and A. J. Lyons, Jr.
Develop. Ind. Microbiol. 10: 183-221. 1969
- 2476 PRODUCTION OF ANTIBIOTICS BY ALTERNARIA SPECIES
L. A. Lindenfelser and A. Ciegler
Develop. Ind. Microbiol. 10: 271-278. 1969
- 2485 INVERSION OF SUCROSE BY FUNGAL SPORES
G. E. N. Nelson, D. E. Johnson, and A. Ciegler
Develop. Ind. Microbiol. 10: 284-289. 1969

- 2500 * HYBRIDIZATION AS A BASIS FOR SPECIATION IN THE GENUS HANSENULA
L. Wickerham
In "Yeasts," ed. Anna Kocková Kratochvilová, Proc. 2nd Symp.
on Yeasts, held at Bratislava, Czechoslovakia, July 16-21, 1966,
pp. 41-44. 1969
- 2452 MILK-CLOTTING ACTIVITY OF PROTEINASES PRODUCED BY RHIZOPUS
Hwa L. Wang, Doris I. Ruttle, and C. W. Hesseltine
Can. J. Microbiol. 15(1): 99-104. January 1969
- 2453 NOTE ON THE NATURAL OCCURRENCE OF OCHRATOXIN A
Odette L. Shotwell, C. W. Hesseltine, and Marion L. Goulden
J. Ass. Off. Anal. Chem. 52(1): 81-83. January 1969
- 2475 ORIENTAL FERMENTED FOODS MADE FROM SOYBEANS
C. W. Hesseltine and Hwa L. Wang
Proc. Ninth Dry Bean Res. Conf., Fort Collins, Colo.,
Aug. 13-15, 1968
West. Util. Res. Develop. Div.
U.S. Agr. Res. Serv., ARS 74-50, pp. 45-52. February 1969
- 2529 NEW HOMOTHALLIC TAXA OF HANSENULA
Lynferd J. Wickerham
Mycopathol. Mycol. Appl. 37(1): 15-32. February 1969
- 2473 PUBLICATIONS AND PATENTS ON FERMENTATION RESEARCH DURING 1968
North. Util. Res. Develop. Div.
U.S. Agr. Res. Serv., ARS 71-38-1, 10 pp. March 1969 [Processed]
- 2479 SUBSTRATE CONVERSION BY FUNGAL SPORES ENTRAPPED IN SOLID MATRICES
D. E. Johnson and A. Ciegler
Arch. Biochem. Biophys. 130(1-2): 384-388. March 1969
- 2493 RATE OF OXYGEN UPTAKE OF HEALTHY AND DISEASED LARVAE OF THE
JAPANESE BEETLE
Bernard A. Weiner, Grant St. Julian, and William F. Kwolek¹
J. Invertebr. Pathol. 13(2): 250-255. March 1969
- 2494 COURSE OF SPORULATION OF BACILLUS POPILLIAE IN LIQUID MEDIUM
CONTAINING ACTIVATED CARBON
William C. Haynes and Lenora J. Rhodes
J. Invertebr. Pathol. 13(2): 161-166. March 1969
- 2495 D-MANNITOL METABOLISM BY ASPERGILLUS CANDIDUS
Gerald W. Strandberg
J. Bacteriol. 97(3): 1305-1309. March 1969

¹ USDA Biometrical Serv., Peoria, Ill.

- 2508 KENAF JUICE: COMPOSITION AND USE IN FERMENTATION MEDIA
M. O. Bagby, I. A. Wolff, and M. C. Cadmus
Tappi 52(3): 442-445. March 1969
- 2498 FORMATION OF A C₂₂ DIHYDROXYKETO ACID BY A YEAST
Ronald F. Vesonder and Frank H. Stodola
Can. J. Chem. 47(7): 1247-1249. April 1969
- 2499 BIOLOGICAL ACTIVITY OF AFLATOXIN B_{2a}
E. B. Lillehoj and A. Ciegler
Appl. Microbiol. 17(4): 516-519. April 1969
- 2512 * ARS CULTURE COLLECTION
C. W. Hesseltine, W. C. Haynes, L. J. Wickerham, and J. J. Ellis
Bull. Microbiol. Inst. Czech. 16(2): 10-12. April 1969
- 2506 OCHRATOXIN A: OCCURRENCE AS NATURAL CONTAMINANT OF A CORN SAMPLE
Odette L. Shotwell, C. W. Hesseltine, and Marion L. Goulden
Appl. Microbiol. 17(5): 765-766. May 1969
- 2524 MYCOTOXINS AS A POSSIBLE CAUSE OF FESCUE TOXICITY
S. G. Yates, H. L. Tookey, J. J. Ellis, W. H. Tallent,
and I. A. Wolff
J. Agr. Food Chem. 17(3): 437-442. May-June 1969
- 2561 AN ORANGE-YELLOW MUTANT OF ASPERGILLUS PARASITICUS PRODUCES
AFLOTXIN
J. J. Ellis
Mycologia 61(3): 651-653. May-June 1969
- 2516 TRANSFORMATION OF AFLATOXIN B₁ BY STEROID HYDROXYLATING FUNGI
R. W. Detroy and C. W. Hesseltine
Can. J. Microbiol. 15(6): 495-500. June 1969
- 2533 L ASPARAGINASE PRODUCTION BY VARIOUS BACTERIA
R. E. Peterson and A. Ciegler
Appl. Microbiol. 17(6): 929-930. June 1969
- 2535 ANTIBACTERIAL COMPOUND FROM A SOYBEAN PRODUCT FERMENTED
BY RHIZOPUS OLIGOSPORUS
Hwa L. Wang, Doris I. Ruttle, and C. W. Hesseltine
Proc. Soc. Exp. Biol. Med. 131(2): 579-583. June 1969
- 2536 A CANDIDIASIS IN LARVAE OF THE DOUGLAS-FIR TUSsock MOTH,
HEMEROCAMPA PSEUDOTSUGATA
Mauro E. Martignoni,² Paul J. Iwai,² and Lynferd J. Wickerham
J. Invertebr. Pathol. 14(1): 108-110. July 1969

² Forestry Sciences Laboratory, USDA, Corvallis, Ore.

- 2537 AFLATOXINS: IMPROVED RESOLUTION BY THIN LAYER CHROMATOGRAPHY
R. D. Stubblefield, G. M. Shannon, and O. L. Shotwell
J. Ass. Off. Anal. Chem. 52(4): 669-672. July 1969
- 2538 L ASPARAGINASE PRODUCTION BY ERWINIA AROIDEAE
R. E. Peterson and A. Ciegler
Appl. Microbiol. 18(1): 64-67. July 1969
- 2539 TREMORGENIC TOXIN FROM PENICILLIUM PALITANS
Alex Ciegler
Appl. Microbiol. 18(1): 128-129. July 1969
- 2545 AN ANTIBIOTIC COMPLEX FROM ALTERNARIA BRASSICICOLA
A. Ciegler and L. A. Lindenfelser
Experientia 25(7): 719-720. July 1969
- 2550 METHYLATION OF FATTY ACIDS IN A METHIONINE-DEPENDENT AGROBACTERIUM TUMEFACIENS CONTROLLED WITH EXOGENOUS METHIONINE
Tsuneo Kaneshiro and Paul J. Thomas
Biochim. Biophys. Acta 187(1): 26-35. July 1969
- 2547 ENZYMATIC LYSIS OF VEGETATIVE CELLS OF BACILLUS POPILLIAE AND OTHER SPOREFORMERS
G. R. Hrubant and R. A. Rhodes
Can. J. Microbiol. 15(8): 827-833. August 1969
- 2576 SCANNING ELECTRON AND PHASE-CONTRAST MICROSCOPY OF BACTERIAL SPORES
L. A. Bulla, G. St. Julian, R. A. Rhodes, and C. W. Hesseltine
Appl. Microbiol. 18(3): 490-495. September 1969
- 2578 MICROBIAL HYDRATION OF CIS-9-ALKENOIC ACIDS
E. N. Davis, L. L. Wallen, J. C. Goodwin, W. K. Rohwedder, and R. A. Rhodes
Lipids 4(5): 356-362. September 1969
- 2592 SURVEY OF CEREAL GRAINS AND SOYBEANS FOR THE PRESENCE OF AFLATOXIN: I. WHEAT, GRAIN SORGHUM, AND OATS
Odette L. Shotwell, C. W. Hesseltine, H. R. Burmeister
W. F. Kwolek,¹ Gail M. Shannon, and H. H. Hall
Cereal Chem. 46(5): 446-454. September 1969
- 2593 SURVEY OF CEREAL GRAINS AND SOYBEANS FOR THE PRESENCE OF AFLATOXIN. II. CORN AND SOYBEANS
Odette L. Shotwell, C. W. Hesseltine, H. R. Burmeister, W. F. Kwolek,¹ Gail M. Shannon, and H. H. Hall
Cereal Chem. 46(5): 454-463. September 1969

- 2604 TWO NEW MEMBERS OF THE MUCORALES
J. J. Ellis and C. W. Hesseltine
Mycologia 61(5): 863-872. September-October 1969
- 2591 SURVEY OF SOME ACTINOMYCETALES FOR α -GALACTOSIDASE ACTIVITY
A. J. Lyons, Jr., T. G. Pridham, and C. W. Hesseltine
Appl. Microbiol. 18(4): 579-583. October 1969
- 2600 AEROBIC AND FACULTATIVE MICROFLORA OF FRESH AND SPOILED REFRIGERATED DOUGH PRODUCTS
C. W. Hesseltine, R. R. Graves, Ruth Rogers, and H. R. Burmeister
Appl. Microbiol. 18(5): 848-853. November 1969

REPUBLICATION

- 378 ORIENTAL METHODS OF USING SOYBEANS AS FOOD. WITH SPECIAL ATTENTION TO FERMENTED PRODUCTS AND NOTES ON ORIENTAL FARMING PRACTICES
Allan K. Smith
North. Util. Res. Develop. Div.
U.S. Agr. Res. Serv., ARS-71-17, 65 pp. May 1969 [Processed]
- 2413 MYCOTOXINS
C. W. Hesseltine
Mycopathol. Mycol. Appl. 29(5): 1-14. December 1969
- 2413 * MYCOTOXINS IN FEEDS
Clifford W. Hesseltine
Tec. Molitoria 19(18): 506-518. 1968
- [Report of research work supported with funds provided by the U. S. Department of Agriculture under the authority of U. S. Public Law 480, 83rd Congress, and sponsored by the Northern Utilization Research and Development Division.]
- 262-F STRUCTURE AND BIOSYNTHESIS OF THE BACTERIAL WALL PEPTIDOGLYCAN
J. M. Ghuyssen
University of Liege, Liege, Belgium
In "Peptides 1968," Proc. 9th Eur. Symp., Paris, France, April 1968, pp. 283-292. 1968

- 266-F ANTIVIRAL ACTIVITY OF MYCOPHENOLIC ACID. STUDIES ON ANTIVIRAL AND ANTITUMOR ANTIBIOTICS. IV
Kunio Ando, Seikichi Suzuki,³ Gakuzo Tamura, and Kei Arima
University of Tokyo, Tokyo, Japan
J. Antibiot. 21(11): 649-652. November 1968
- 277-F CHARACTERIZATION OF THE MICROCOCCUS LYSODEIKTICUS TYPE OF PEPTIDOGLYCAN IN WALLS OF OTHER MICROCOCCACEAE
J. N. Campbell, Melina Leyh-Bouille, and Jean-Marie Ghuysen
University of Liege, Liege, Belgium
Biochemistry 8(1): 193-200. January 1969
- 278-F THE PEPTIDOGLYCAN IN WALLS OF BUTYRIBACTERIUM RETTGERI
Micheline Guinand, Jean-Marie Ghuysen, Karl H. Schleifer, and Otto Kandler
University of Liege, Liege, Belgium
Biochemistry 8(1): 200-207. January 1969
- 279-F STRUCTURE OF THE MESO-DIAMINOPIMELIC ACID CONTAINING PEPTIDOGLYCANS IN ESCHERICHIA COLI B AND BACILLUS MEGATERIUM KM
Jean van Heijenoort, Lydia Elbaz, Philippe Dezelee, Jean-Francois Petit, Evangelos Bricas, and Jean-Marie Ghuysen
University of Liege, Liege, Belgium
Biochemistry 8(1): 207-213. January 1969
- 280-F AN IMPROVED TECHNIQUE FOR THE PREPARATION OF STREPTOMYCES PEPTIDASES AND N-ACETYLMURAMYL-L-ALANINE AMIDASE ACTIVE ON BACTERIAL WALL PEPTIDOGLYCANS
Jean-Marie Ghuysen, Louis Dierickx, Jacques Coyette, Melina Leyh-Bouille, Micheline Guinand, and J. N. Campbell
University of Liege, Liege, Belgium
Biochemistry 8(1): 213-222. January 1969
- 276-F BREEDING AND STABILITY OF DIPLOID SACCHAROMYCES ROUXII
Haruhiko Mori and Hiroshi Onishi
Noda Institute for Scientific Research, Noda-shi, Chiba-ken, Japan
J. Ferment. Technol. 47(6): 394-397. June 1969

PATENTS

[These patents are assigned to the Secretary of Agriculture. Printed copies of patents may be purchased (50 cents each) from the Commissioner of Patents, U.S. Patent Office, Washington, D.C. 20231. Order by number, do not send stamps.]

SHORTENED FERMENTATION PROCESS FOR OBTAINING D-Mannitol
Karl L. Smiley, Martin C. Cadmus, and Seymour Peter Rogovin
U.S. Patent 3,427,224. February 11, 1969

³Chugai Pharmaceutical Co., Ltd., Tokyo, Japan

MICROBIOLOGICAL DECONTAMINATION OF AFLATOXIN-CONTAMINATED EDIBLES

Alex Ciegler and Eivind B. Lillehoj

U.S. Patent 3,428,458. February 18, 1969

PROCESS FOR DELAYED PRODUCTION OF JAPANESE BEETLE LARVAE

Grant St. Julian

U.S. Patent 3,463,122. August 26, 1969

POLAROGRAPHIC ELECTRODE STRUCTURE

Bernard A. Weiner

U.S. Patent 3,476,670. November 4, 1969

CONTINUOUS PROCESS FOR PRODUCING XANTHOMONAS HETEROPOLYSACCHARIDE

Seymour Peter Rogovin

U.S. Patent 3,485,719. December 23, 1969

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